



January 12, 2010

Eric Ebersberger Chief, Water Use Section Bureau of Drinking Water Wisconsin Department of Natural Resources 101 S. Webster Street P.O. Box 7921 Madison, WI 53707-7921

Re: Water Conservation Measures

Dear Mr. Ebersberger,

The City of New Berlin is submitting this letter to comply with Section V of the Water Supply Service Area Plan and Diversion Approval dated May 21, 2009.

In adopting Resolution 09-11, the City committed to reduce per capita residential water consumption from the January 1, 2008 level of 68.03 gallons per capita per day by not less than ten (10) percent by the year 2020. The Department of Natural Resources (DNR) included this commitment in the Water Supply Service Area Plan & Approval issued to the City for the diversion of Lake Michigan water to service the middle third of the City. That approval requires the City to inform the DNR of the water conservation measures it intends to take to achieve this reduction.

In calculating the figures and the 2007 baseline, the City did the following:

- 1) Total consumption was taken off of the actual billing total that is billed per quarter and consecutive annual quarters were combined.
- 2) Customer Class were separated by Residential (single family unit) and separate basins (Lake Michigan and Mississippi), the same was done for Commercial Apt/Condo and their respective basin. This complies with the provision to remove Apt/Condo from the commercial class as we did when we identified these entities on our billing as required by our agreement.
- 3) Due to some commercial Apt/Condo connections being either one connection to each building or each unit, we went through all assessment roles to determine their connection and number of units served. At this time we also broke it down to 1, 2, and 3 bedroom units and applied the appropriate population based on the 2009 MMSD recovery manual (2-1 & 2-3)

Mayor Jack F. Chiovatero Mayor's Office

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4) By using the method in Step 3 above, we used these population calculations and divided them into the total annual consumption and divided that number by 365 to determine the average capita gallons per day.

The City feels this is a very accurate number and this can be adjusted each year by any added/deleted residential units being drawn from the assessment roles and verified through the connection inventory. Calculation worksheets are attached.

The measures of conservation are described below. Most, if not all, of these are found in the same or similar form in the City's water conservation plan which was approved by the Common Council on December 8, 2009. That plan includes additional measures intended to conserve and manage all aspects of water resources and uses within the City including storm water management and groundwater protection. A copy of the Council approved plan is attached.

The City's water rate structure includes a quarterly service charge plus charges based on water usage per 1,000 gallons. The quarterly service charge includes certain fixed costs but does not include any water use. This rate structure provides an incentive for all water users, even those with minimal usage, to use water efficiently to reduce water usage charges. These charges are explained in full detail at www.newberlin.org, under the Utility Department website. The City commits to continuing to apply a service charge that includes no water usage.

The City's water utility is operated as an enterprise system, and water rates reflect full cost pricing. The City commits to continuing to seek full cost pricing rate structure approval from the Public Service Commission.

Most dwelling units in residential multi-family and condominium buildings in the City are individually metered for water use. The City commits to continuing this practice in any future construction of these types of buildings.

The City currently has in place a program to flag significant quarterly changes in individual water meter readings with follow-up to determine a cause and take or suggest remedial action. The new and replacement water meters currently being installed contain technology that enhances the effectiveness of this program. The City commits to continuing its program to flag and follow-up on significant quarterly water meter reading changes and to continue to install new and replacement meters with technology to enhance this program. The city replaces all meters on a scheduled cycle to ensure compliance and accurate readings.

Before switching from groundwater to softer Lake Michigan water, most water utility customers used water softeners to remove hardness. The City has been suggesting to water utility customers that they consider discontinuing the use of water softeners and not installing new water softeners. We continue to educate our Utility customer through the City newsletter, billing inserts and important message notices on the Utility Bill. When the Utility website is updated, this information will be included. The City commits to continuing to promote these suggestions.

The City's quarterly water use charges are based on a declining block rate structure. The first quarterly usage block, 35,000 gallons, includes most typical residential use, except for some peak summertime use. The declining block rate structure primarily benefits larger commercial and industrial users. The City commits to continued monitoring of its rate structure.

The City has adopted an ordinance limiting lawn sprinkling year-round to no more than every other day based on odd and even addresses. The City commits to further limit lawn sprinkling during a significant portion of mid-day hours when evaporation rates are high. An ordinance to add possible fines will be considered before 2010 sprinkling season.

The City's lawn sprinkling ordinance permits watering at anytime with a hand held watering can or hose. The City commits to require that the use of a domestic hose for any purpose always be in conjunction with an automatic hand-held shut-off valve.

The City commits to requiring all new installed lawn irrigation systems to include rain and moisture sensor features.

The City has currently included a rebate program for the replacement of toilets and showerheads in both the Water Utility and the Wastewater Utility. This program will be continued as long as the effectiveness makes this program viable.

At this time our billing is very simplistic and cumbersome and requires a variety of manual input and calculations. As technology and an updated billing cycle becomes available through the aging system, the City commits to modifying water bills to include, in addition to the current quarter's water usage, water usage from the previous four quarters for comparison purposes by the end user.

As noted in our conservation plan, as technology and advances in water conservation become known and available, the City commits to research and initiate such measures to continue a reduction in per capita use and reduce controlled water consumption systemwide in the future.

On or before March 1st of each year, the city will report progress to the DNR & PSC in our conservation measures and per capita use of the prior year. At this time all reports due to the DNR that are mandated by Section VI of the Water Supply Service & Diversion Approval of May 21, 2009 will be submitted.

Respectfully Submitted

Jack F. Chiovatero

Mayor

City of New Berlin

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2007		-11)					r	Oor conite
Consun	nption (thousand ga	•	Q2	Q3	Q4	Total	population	Per capita gals/day
P	I Gual Olassa I	Q1		Cons	Cons	IUlai	population	gais/day
Basin	Cust Class	Cons	Cons 13,873	14,777	13,914	55,367	3,189	
MILW	C-CONDO/APT	12,803				•		
MILW	R Residential	72,390	79,898	123,742	84,953	360,983	13,548	68.15
	TOTALS					416,350	16,737	00.10
MISB	C-CONDO/APT	20,381	21,676	23,832	21,572	87,461	3,131	
MISB	R Residential	37,084	40,978	52,849	41,412	172,323	7,361	
	TOTALS	, , , , , , , , , , , , , , , , , ,				259,784	10,492	67.84
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			Combined to	otal		676,134	27,229	68.03
2008	}							
Consun	nption (thousand ga	allons)					í	Per capita
		Q1	Q2	Q3	Q4	Total	population	gals/day
Basin	Cust Class	Cons	Cons	Cons	Cons			
MILW	C-CONDO/APT	13,966	13,066	15,970	12,717	55,719	,	
MILW	R Residential	76,124	73,747	122,459	71,330	343,660	13,624	
	TOTALS					399,379	16,859	64.73
MISB	C-CONDO/APT	23,281	19,965	24,947	19,981	88,174		
MISB	R Residential	40,768	37,165	55,554	34,946	168,433	7,398	05.45
	TOTALS					256,607	10,761	65.15
		,	Samalain and A	-4-1		6EE 000	27 620	64.90
		,	Combined to	otai		655,986	27,620	64.89
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2009								Day anyita
Consun	nption (thousand ga		00	02	04	Total	population	Per capita gals/day
Paois	Guet Cless	Q1 Cons	Q2 Cons	Q3 Cons	Q4 Cons	lotai	population	gais/day
Basin MILW	Cust Class C-CONDO/APT	16,122	13,562	15,728	12,695	58,107	3,304	
MILW	R Residential	72,480	76,820	117,639	70,046	336,985	13,527	
IVIILAA	TOTALS	12,400	10,020	117,000	70,040	395,092	16,831	64.31
	IOIALG					000,002	10,001	04.01
MISB	C-CONDO/APT	24,115	21,070	24,476	19,038	88,699	3,458	
MISB	R Residential	40,078	40,272	51,056	34,044	165,450	7,337	
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	'	•						
		(Combined t	otal		649,241	27,626	64.39

Connec	ctions					occupancy			
		Q1	Q2	Q3	Q4	Average	factor	population	
Basin	Cust Class	Count	Count	Count	Count				
MILW	C-CONDO/APT	264	264	265	265				
MILW	R Residential	5,024	5,034	5,042	5,046	5,037	2.69	13,548	
MISB	C-CONDO/APT	598	611	619	644	ļ	**************************************		
MISB	R Residential	2,733	2,737	2,737	2,738	2,736	2.69	7,361	

Connec	ctions							
		Q1	Q2	Q3	Q4	Average	factor	population
Basin	Cust Class	Count	Count	Count	Count			
MILW	C-CONDO/APT	265	268	270	270	İ		
MILW	R Residential	5,056	5,060	5,069	5,074	5,065	2.69	13,624
MISB	C-CONDO/APT	654	661	668	672	664	j	_
MISB	R Residential	2,745	2,748	2,753	2,755	2,750	2.69	7,398

Connec	วแอกร					occupancy			
		Q1	Q2	Q3	Q4	Average	factor	population	
Basin	Cust Class	Count	Count	Count	Count				
MILW	C-CONDO/APT	271	272	276	277	V.	:		
MILW	R Residential	5,080	5,083	5,087	5,092	5,086	2.66	13,527	
MISB	C-CONDO/APT	679	681	685	685)			
MISB	R Residential	2,756	2,755	2,760	2,762	2,758	2.66	7,337	